

REMARKS

I. Status of the Claims

Claims 1, 2, and 5-26 are currently pending. Claims 18-26 have been withdrawn in view of the March 19, 2004 Restriction Requirement. Claims 5-7, 10-12, 14, and 15 have been amended to conform them to U.S. practice. Claims 3 and 4 have been canceled without prejudice or disclaimer. Claim 1 has been amended to incorporate the subject matter of canceled claim 3. Thus, no new matter has been introduced by these amendments.

II. Priority

The Examiner requested that Applicants update the priority data in the specification. *Office Action*, page 2. Applicants have amended the specification in the manner requested by the Examiner.

III. Claim Objections

The Examiner has objected to claims 6-17 as being in improper form because a multiple dependent claim cannot depend from any other multiple claims. *Office Action*, page 2. Applicants have amended the claims and submit that the amendments render the objection moot, and respectfully request that it be withdrawn.

IV. Rejections Under 35 U.S.C. § 102

A. **Hordvick**

The Examiner has rejected claims 1-3 under 35 U.S.C. § 102(b) as anticipated by WO 83/04041 to Hordvick et al. ("*Hordvick*") for the reasons disclosed on page 3 of

the Office Action. Applicants respectfully traverse this rejection for at least the reasons presented below.

A claim is anticipated only if each and every element set forth in the claim is either expressly or inherently described in a single prior art reference. M.P.E.P. §2131. In this case, *Hordvick* fails to, expressly or inherently, disclose “the polymer base and the inorganic flame-retardant filler are mixed at a predetermined temperature for a predetermined time so as to reduce moisture contained in the flame-retardant filler, and then a dehydrating agent is added to the resulting composition,” as required by claims 1 and 2, as amended.

Applicants submit that one of ordinary skill in the art would recognize that *Hordvick* neither explicitly nor implicitly teaches this limitation. Specifically, *Hordvick* teaches methods of producing a flame or fire resistant material by first mixing all of the required components, dry at ambient temperature, and then extruding the resulting admixture. (Page 8, lines 19-24). *Hordvick* goes on to provide specific examples, where again all of the materials are mixed at the same time at ambient temperature, before the resulting mixture is melted by an extruder and subsequently cooled and fed through a perforated plate to be chopped into granules. (Page 9, line 13 - page 10, line 7; page 10, line 24 to page 11, line 16).

A person of ordinary skill in the art would recognize that *Hordvick* does not teach or even remotely suggest that the polymer base and the inorganic flame-retardant filler are mixed for a predetermined time before the dehydrating agent is added to the resulting composition. Nor does *Hordvick* teach or suggest that the polymer base and the inorganic flame-retardant filler are mixed at a predetermined temperature for a

predetermined time so as to reduce moisture contained in the inorganic flame-retardant filler. *Hordvick* merely discloses mixing all components at the same time.

Accordingly, because anticipation requires that each and every limitation of the claims be taught, either expressly or inherently by the prior art, *Hordvick* does not anticipate the claimed invention. Applicants respectfully request that the Examiner withdraw this rejection.

B. Redondo

The Examiner has rejected claim 1 under 35 U.S.C. § 102(e)¹ as anticipated by U.S. Patent No. 6,552,112 to Redondo et al. ("*Redondo*") for the reasons disclosed on page 3 of the Office Action. Applicants respectfully traverse this rejection for at least the reasons discussed below.

As mentioned above, for anticipation under 35 U.S.C. § 102, the reference must teach every limitation of the claimed invention either explicitly or impliedly. M.P.E.P. § 2131. Thus, in order to anticipate claim 1, *Redondo* would have to identically disclose a process for producing a self-extinguishing cable with low-level production of fumes that comprises all the elements of claim 1, including preparing a flame-retardant composition comprising "a polymer base," "an inorganic flame-retardant filler," and "a dehydrating agent." In this case, *Redondo* fails to teach or suggest "a dehydrating agent," as recited in claim 1.

¹ It is noted that the Examiner expressed the rejection as a 35 U.S.C. § 102(b) rejection. *Redondo*, however, published after Applicants' filing date. Applicants respectfully submit that Examiner intended to reject the claim under 35 U.S.C. § 102(e). Regardless, the pending claims are not anticipated by *Redondo* under either subsection of 35 U.S.C. § 102 for substantially the same reasons.

The Examiner asserts that *Redondo* teaches “adding a dehydrating/drying agent of calcium oxide.” *Office Action*, page 3. In so doing, the Examiner points to the disclosure in col. 9, lines 8-15 of *Redondo*. This portion of the reference, however, does not teach or suggest dehydrating agents, let alone calcium oxide. Rather, it states that “[o]ne or more inorganic oxides or salts, such as CoO, TiO₂, Sb₂O₃, Fe₂O₃, CaCO₃, or mixtures thereof . . .” can be added to its compositions. As stated in both *Redondo* (col. 9, line 8) and Applicants’ specification (page 6, lines 3-18), these disclosed compounds are merely flame-retardant fillers. While some dehydrating agents are salts, in view of the explicit description of the compounds as flame-retardant fillers and the fact that the listed items are known flame-retardant fillers, a person of ordinary skill in the art would recognize this disclosure as only a disclosure of flame-retardant fillers and not of dehydrating agents, such as calcium oxide.

Since *Redondo et al.* does not teach or suggest a dehydrating agent, Applicants respectfully request that the Examiner withdraw this rejection.

V. Rejections Under § 103

A. *Redondo*

The Examiner has rejected claims 4-5 under 35 U.S.C. § 103 as unpatentable over *Redondo*, for the reasons disclosed on page 4 of the Office Action. Applicants respectfully traverse this rejection for at least the following reason.

35 U.S.C. §103(c) provides:

Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), (g) or section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at

the time of the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

U.S. Patent No. 6,552,112, which issued on April 22, 2003, was filed on January 21, 2000, as a continuation of PCT application, which was filed in English on July 10, 1998. Applicants filed the present application on December 20, 1999 and claim benefit of priority to a U.S. Provisional Application, filed December 1, 1999. Therefore, U.S. Patent No. 6,552,112 qualifies as prior art, if at all, only under one or more of 35 U.S.C. §102(e), (f), or (g), as required under 35 U.S.C. § 103(c).

As stated above, 35 U.S.C. § 103(c) states that prior art under Section 102(e) shall not preclude patentability of an invention if the invention was (1) developed by another person, and (2) commonly owned or subject to an obligation of assignment to the same person. U.S. Patent No. 6,552,112 meets both of these requirements of 35 U.S.C. § 103(c), because, for example, Luca Castellani, one of the inventors of U.S. Patent No. 6,552,112, is not an inventor of the present application and is, therefore, "another person" or inventive entity in the eyes of the law.

Furthermore, the assignment of the present application is to Pirelli Cavi E Sistemi S.p.A., which is the same entity named as the assignee listed on the face of U.S. Patent No. 6,552,112, as required for 35 U.S.C. § 103(c). Applicants have confirmed that the present application and U.S. Patent No. 6,552,112 were, at the time the present invention was made, owned by, or subject to an obligation of assignment to, the same corporate entity, *i.e.*, Pirelli Cavi E Sistemi S.p.A.

Therefore, 35 U.S.C. § 103(c) operates to remove *Redondo* as prior art to the present application for purposes of obviousness rejections. M.P.E.P. § 706.02(I)(1). Accordingly, Applicants submit that the present rejection should be withdrawn.

B. Hordvick

The Examiner has rejected claims 4 and 5 under 35 U.S.C. § 103(a) as being unpatentable over *Hordvick* for the reasons disclosed on pages 4-5 of the Office Action. Applicants respectfully traverse this rejection.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. See M.P.E.P. § 2143. Furthermore, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. See *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). In this case, Applicants submit that the Examiner has not established a *prima facie* case of obviousness.

First, as discussed in the anticipation rejection, which is incorporated herein by reference, *Hordvick* does not teach or suggest "wherein the polymer base and the inorganic flame-retardant filler are mixed at a predetermined temperature for a predetermined time so as to reduce moisture contained in the inorganic flame-retardant filler, and then a dehydrating agent is added to the resulting composition," as required by claim 1 and all claims that depend therefrom. Accordingly, for at least this reason, Applicants respectfully request that the rejection be withdrawn.

Second, *Hordvick* provides no motivation for one skilled in the art to modify the teachings of *Hordvick* to yield the claimed invention. Applicants submit that *Hordvick*

provides no suggestion to a person of ordinary skill in the art that there is any benefit or other reason to (1) mix the polymer base and the inorganic flame-retardant filler at a predetermined temperature for a predetermined time so as to reduce moisture contained in the inorganic flame-retardant filler or (2) add a dehydrating agent to the resulting composition after mixing. Accordingly, nothing in *Hordvick* would have led one skilled in the art to modify this reference. See M.P.E.P § 2143.01. Even if there were such a suggestion, the Office would still have to show that there would be a reasonable expectation of success in doing so. See M.P.E.P § 2143.02.

Because the Office has not set forth a proper *prima facie* case of obviousness, the rejection of the dependent claims should be withdrawn. Because the independent claims are nonobvious, their dependent claims are also nonobvious. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

VI. Conclusion

In view of the amendments and remarks, Applicants respectfully request reconsideration of this application, and the timely allowance of all pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 06-0916.

Respectfully submitted,

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